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Attachment of Tumor Cells to the Micropatterns of Glutaraldehyde (GA)-Crosslinked Gelatin

Yu-Cheng Ou, Chih-Wen Hsu, Lung-Jieh Yang[1,*],
Hsieh-Cheng Han[2], Yi-Wen Liu[2] and Chien-Yuan Chen[2]

Department of Mechanical & Electro-Mechanical Engineering, Tamkang University,
#151, Ying-Chan Rd., Tamsui, 25137, Taiwan, Republic of China
[1]National Applied Research Laboratories,
3F, #106, Ho-Ping E. Road, Sec. 2, Taipei, 10622, Taiwan, Republic of China
[2]Institute of Microbiology and Biochemistry, National Taiwan University,
#1, Sec. 4, Roosevelt Rd., Taipei, 10617, Taiwan, Republic of China

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In this work, we propose a novel technique for inducing the attachment of tumor cells to the micropatterns of glutaraldehyde (GA)-crosslinked gelatin. It provides another method to crosslink gelatin other than using photosensitizing agents or selective GA crosslink techniques. This novel technique can ensure the degree of crosslink, prevent an over-crosslink from pattern deformation and enhance the adhesion between gelatin and a glass slide. The best spatial resolution of micro-gelatin bases can be 2 μm. The micropatterns of GA-crosslinked gelatin can still be formed successfully by conventional photolithography. The much less toxic and more biocompatible approaches of strengthening gelatin microstructures can be developed according to the idea herein.

*Corresponding author: e-mail: Ljyang@mail.tku.edu.tw